

# ABSTRACT

A disturbing signal detecting device that detects a disturbing signal and improves error correcting capability for a signal including an interference, and an OFDM receiver that improves reception power for a signal including an interference are disclosed. The disturbing signal detecting device and OFDM receiver perform an IFFT computation for a transmission line characteristic calculated from pilot signals by an IFFT computing unit. A threshold processing part substitutes "0" for a value of a time-base signal obtained as an IFFT computation result, if the value exceeds a threshold. An FFT computing unit performs an FFT computation for a signal processed by the threshold processing part, to convert the signal to a frequency-base signal. An interference detector interpolates timewise and frequencywise the frequency-base signal obtained from the FFT computing unit, to calculate a disturbing signal added to the OFDM signal band.